AMENDMENTS TO THE SPECIFICATION

At page 2, directly after the subheading "Brief Description of the Drawings" on line 16, please add the following paragraphs:

Figure 1 depicts an elution profile of an extract of oocyte homogenate. The arrow indicates the elution of 4-oxo-retinyl ester.

Figure 2 depicts retinoid content of oocytes ay different stages of maturation. The only retinoid that accumulates progressively during oogenesis is the 4-oxo-retinyl ester (circles). The amounts of other retinoids remain constant. Only that of beta-carotene is shown for comparison (triangles).

Figures 3-3B depict mass spectrometric analyses of the major oocyte retinoid. (A) shows a single peak of molecular mass 582 daltons observed upon analysis of the intact molecule. (B) shows the reagmentation pattern of the major oocyte retinoid which reveals two peaks of 297 and 566 daltons, consistent with loss of a water molecule from the intact species.

Figure 4 depicts an absorption spectrum of the major oocyte retinoid. The 380 nm maximum is characteristic of a 4-oxo retinoid.

Figure 5 depicts kinetics of utilization of the 4-oxo-retinyl ester during embryonic milestones.

Figures 6A-6B depicts the effect of UV light on the content of the 4-oxo-retinyl ester (peak eluting at 23 minutes). (A) shows data from a control embryo and (B) shows data from a UV exposed embryo.

Figures 7A-7B depict the index of axial deficiency of embryos exposed to UV irradiation. (A) shows control embryos and (B) shows exposed embryos.

Figure 8 depicts the effects of 4-oxoRE$_{18}$ on growth of HT29 cancer cells. Within three days of exposure, proliferation is arrested (boxes). On day 28, treatment is discontinued. Twelve days later, proliferation resumes at a rate that is 2.3x less than control (plus signs).

Figure 9 depicts the effect of 4-oxoRE$_{18}$ on HT29 colon cancer cell CEA production. Treatment period is from 1-28 days. During the quiescent proliferative period, days 3-28, there is a 30-fold overproduction of the differentiation marker CEA. Its production returns to or below control prior to resumption of cell division (see Figure 6).

Figure 10 depicts the effect of 4-oxoRE$_{18}$ on alkaline phosphatase (boxes, circles are control).

With the paragraph starting on page 2, line 17, please amend the specification as follows:

Figures [[7]] 11A-11E ~~depicts~~ depict the results of experiments measuring the effect of UV exposure on embryo teratology.